



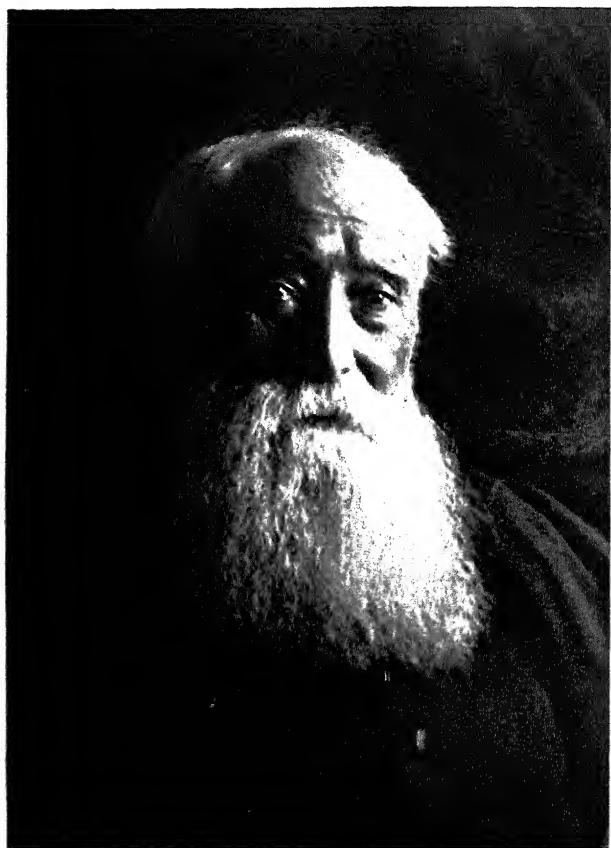
**Hibberby Edition**

**THE WRITINGS OF  
JOHN BURROUGHS**

**WITH PORTRAITS AND MANY ILLUSTRATIONS**

**VOLUME XXII**





*John Burroughs (March 23, 1921)*



THE WRITINGS  
OF  
JOHN BURROUGHS

XXII

UNDER THE MAPLES



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## PREFACE

It was while sitting in his hay-barn study in the Catskills and looking out upon the maple woods of the old home farm, and under the maples at Riverby, that the most of these essays were written, during the last two years of the author's life. And it was to the familiar haunts near his Hudson River home that his thoughts wistfully turned while wintering in Southern California in 1921. As he pictured in his mind the ice breaking up on the river in the crystalline March days, the return of the birds, the first hepaticas, he longed to be back among them; he was there in spirit, gazing upon the river from the summer-house, or from the veranda of the Nest, or seated at his table in the chestnut-bark Study, or busy with his sap-gathering and sugar-making.

Casting about for a title for this volume, the vision of maple-trees and dripping sap and crisp March days playing constantly before his mind, one day while sorting and shifting the essays for his new book, he suddenly said, "I have it! We'll call it *Under the Maples!*"

His love for the maple, and consequently his pleasure in having hit upon this title, can be gathered from the following fragment found among his miscellaneous notes: "I always feel at home where



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the sugar maple grows It was paramount in the woods of the old home farm where I grew up. It looks and smells like home. When I bring in a maple stick to put on my fire, I feel like caressing it a little. Its fiber is as white as a lily, and nearly as sweet-scented. It is such a tractable, satisfactory wood to handle — a clean, docile, wholesome tree; burning without snapping or sputtering, easily worked up into stovewood, fine of grain, hard of texture, stately as a forest tree, comely and clean as a shade tree, glorious in autumn, a fountain of coolness in summer, sugar in its veins, gold in its foliage, warmth in its fibers, and health in it the year round.”

CLARA BARRUS

*The Nest at Riverby*  
*West Park on the Hudson*  
*New York*

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# UNDER THE MAPLES

## I

### THE FALLING LEAVES

THE time of the falling of leaves has come again. Once more in our morning walk we tread upon carpets of gold and crimson, of brown and bronze, woven by the winds or the rains out of these delicate textures while we slept.

How beautifully the leaves grow old! How full of light and color are their last days! There are exceptions, of course. The leaves of most of the fruit-trees fade and wither and fall ingloriously. They bequeath their heritage of color to their fruit. Upon it they lavish the hues which other trees lavish upon their leaves. The pear-tree is often an exception. I have seen pear orchards in October painting a hillside in hues of mingled bronze and gold. And well may the pear-tree do this, it is so chary of color upon its fruit.

But in October what a feast to the eye our woods and groves present! The whole body of the air seems enriched by their calm, slow radiance. They are giving back the light they have been absorbing from the sun all summer.

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The carpet of the newly fallen leaves looks so clean and delicate when it first covers the paths and the highways that one almost hesitates to walk upon it. Was it the gallant Raleigh who threw down his cloak for Queen Elizabeth to walk upon? See what a robe the maples have thrown down for you and me to walk upon! How one hesitates to soil it! The summer robes of the groves and the forests—more than robes, a vital part of themselves, the myriad living nets with which they have captured, and through which they have absorbed, the energy of the solar rays. What a change when the leaves are gone, and what a change when they come again! A naked tree may be a dead tree. The dry, inert bark, the rough, wirelike twigs change but little from summer to winter. When the leaves come, what a transformation, what mobility, what sensitiveness, what expression! Ten thousand delicate veined hands reaching forth and waving a greeting to the air and light, making a union and compact with them, like a wedding ceremony. How young the old trees suddenly become! what suppleness and grace invest their branches! The leaves are a touch of immortal youth. As the cambium layer beneath the bark is the girdle of perennial youth, so the leaves are the facial expression of the same quality. The leaves have their day and die, but the last leaf that comes to the branch is as young as the first. The leaves and

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the blossom and the fruit of the tree come and go, yet they age not; under the magic touch of spring the miracle is repeated over and over.

The maples perhaps undergo the most complete transformation of all the forest trees. Their leaves fairly become luminous, as if they glowed with inward light. In October a maple-tree before your window lights up your room like a great lamp. Even on cloudy days its presence helps to dispel the gloom. The elm, the oak, the beech, possess in a much less degree that quality of luminosity, though certain species of oak at times are rich in shades of red and bronze. The leaves of the trees just named for the most part turn brown before they fall. The great leaves of the sycamore assume a rich tan-color like fine leather.

The spider weaves a net out of her own vitals with which to capture her prey, but the net is not a part of herself as the leaf is a part of the tree. The spider repairs her damaged net, but the tree never repairs its leaves. It may put forth new leaves, but it never essays to patch up the old ones. Every tree has such a superabundance of leaves that a few more or less or a few torn and bruised ones do not seem to matter. When the leaf surface is seriously curtailed, as it often is by some insect pest, or some form of leaf-blight, or by the ravages of a hail-storm, the growth of the tree and the maturing of its fruit is seriously checked. To



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denude a tree of its foliage three years in succession usually proves fatal. The vitality of the tree declines year by year till death ensues.

To me nothing else about a tree is so remarkable as the extreme delicacy of the mechanism by which it grows and lives, the fine hairlike rootlets at the bottom and the microscopical cells of the leaves at the top. The rootlets absorb the water charged with mineral salts from the soil, and the leaves absorb the sunbeams from the air. So it looks as if the tree were almost made of matter and spirit, like man; the ether with its vibrations, on the one hand, and the earth with its inorganic compounds, on the other—earth salts and sunlight. The sturdy oak, the gigantic sequoia, are each equally finely organized in these parts that take hold upon nature. We call certain plants gross feeders, and in a sense they are; but all are delicate feeders in their mechanism of absorption from the earth and air.

The tree touches the inorganic world at the two finest points of its structure—the rootlets and the leaves. These attack the great crude world of inorganic matter with weapons so fine that only the microscope can fully reveal them to us. The animal world seizes its food in masses little and big, and often gorges itself with it, but the vegetable, through the agency of the solvent power of water, absorbs its nourishment molecule by molecule.

A tree does not live by its big roots—these are

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mainly for strength and to hold it to the ground. How they grip the rocks, fitting themselves to them, as Lowell says, like molten metal! The tree's life is in the fine hairlike rootlets that spring from the roots. Darwin says those rootlets behave as if they had minute brains in their extremities. They feel their way into the soil; they know the elements the plant wants; some select more lime, others more potash, others more magnesia. The wheat rootlets select more silica to make the stalk; the pea rootlets select more lime: the pea does not need the silica. The individuality of plants and trees in this respect is most remarkable. The cells of each seem to know what particular elements they want from the soil, as of course they do.

The vital activity of the tree goes on at three points—in the leaves, in the rootlets, and in the cambium layer. The activity of the leaf and rootlet furnishes the starchy deposit which forms this generative layer—the milky, mucilaginous girdle of matter between the outer bark and the wood through which the tree grows and increases in size. Generation and regeneration take place through this layer. I have called it the girdle of perpetual youth. It never grows old. It is annually renewed. The heart of the old apple-tree may decay and disappear, indeed the tree may be reduced to a mere shell and many of its branches may die and fall, but the few apples which it still bears attest